

IN THE SPECIFICATION

Please replace the paragraph appearing on page 8, line 31 to page 9, line 2 with the following amended paragraph:

According to a particular embodiment, notably corresponding to the trellis structure, said ~~biorthogonal~~ biorthogonal multicarrier signal is a OFDM/OM signal. Special technical solutions may then be contemplated.

On page 12, line 16, amend the heading as follows:

1-Formulation as a modulated transmultiplexer 10

On page 12, after line 19 insert the following paragraphs:

The modulation part 13 comprises 2M branches 131₀ to 131_{2M-1} receiving source data $a_{i,n}$. Each source data is multiplied by $e^{j\frac{\pi}{2}}$ (1311) to obtain $x_i(n)$, which feed an expander of order M 1312, and then a synthesis filter $F_i[z]$ 11.

The outputs of the synthesis filters feed an adder 132 to form a signal s sent through a channel 14. In the demodulation part 15, the signal s feeds 2M branches 151₀ to 151_{2M-1} each comprising analysis filter $H_i[z]$ 12, a decimator of order M 152, a multiplication 153 by $e^{j\frac{\pi}{2}(n-\alpha)}$ and an extraction of the real part 154.

On page 14, after line 27, insert the following paragraphs:

Data feeding each branch of the modulator of figure 5 are multiplied (53) by $2M\sqrt{2c}^{-j\frac{2\pi}{2M}i\frac{D-M}{2}}$, and then transformed through IFFT 51. The outputs of the IFFT feed

polyphase components 52 (see Annex C) and expander 1312.

The received signal $s(k)$ is directed to $2M$ branches (figure 6), each comprising a decimator 152 and a polyphase component 62, which feeds an IFFT 61. The $2M$ outputs of the IFFT comprise a multiplier 63

On page 16, amend Equation (68) as follows:

$$= 2M\sqrt{2}e^{-j\frac{2\pi}{2M}l\frac{D+M}{2}} IFFT\left(\hat{x}_l^{(1)}(n-\alpha), \dots, \hat{x}_{2M-1}^{(1)}(n-\alpha)\right)[\underline{l}]$$